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SCHOOL PLAYGROUNDS

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During the past decade considerable attention has been given to the value of play as a factor in education, and as a result there has been a widespread movement in the matter of providing ample and suitable areas for school playgrounds. As the school building is designed with special reference to the number of children to be housed and to the kinds of activities that are to be carried on, so the grounds should be planned to provide for the physical education and recreational activities of all of the children. Securing adequate space and equipment for these activities has for some time been a problem of importance to State and local educational authorities.

This pamphlet attempts to show what playground provisions are being made for the physical education and recreational activities of school children. The information regarding playgrounds has been secured by means of questionnaires sent to State departments of education, a study of State laws, an examination of the rules and regulations of State boards of education, along with other material regarding playgrounds available in the Office of Education.

I. *Playground areas.*—Some suggested standards; present legislative requirements; regulations of State departments; legislation for condemning areas; recommendations of State boards.

II. *Playground layouts and equipment.*—Planning the layout; regulations and suggestions pertaining to equipment; space requirements for games.

III. *Use of playgrounds after school hours.*—The control of school property; legislation pertaining to after-school use of playgrounds.

IV. *Progress in school playground development.*—Progress reported by State departments; progress in cities; summary.

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I. Playground Areas

Some suggested standards.—In 1867–68 the United States Office of Education made its first study regarding facilities for public recreation in cities and called attention to the need and value of recreational facilities for children as a part of any adequate educational system. At that time the fact was pointed out that very little had been done regarding this matter; in fact, in some cities the cemeteries furnished the only opportunities for pleasure walking, even for the adults.

In 1880 the Annual Report of the United States Commissioner of Education contained an article regarding the school yard, in which 1 acre was suggested as a minimum standard.

In 1907 the Annual Report of the United States Commissioner of Education contained a report of a study regarding school grounds in which it was suggested that 5 or 10 acres should be provided for school playgrounds, according to the total school enrollment. However, in 1914 a special study of school playgrounds was made by the United States Office of Education and the point was brought out at that time that the size of school sites in 1,350 cities varied from one-half to 2 acres.

During the past 10 years considerable progress has been made in the matter of providing adequate areas for school playgrounds. In some instances large areas have been acquired and frequently at considerable expense, not only for new schools but for enlarging the grounds of the older schools. Various educational associations and agencies have assisted in encouraging and directing this movement for larger play areas.

In 1922, Bulletin No. 23, issued by the United States Office of Education, contained a report of the commission on the reorganization of secondary education, appointed by the National Education Association. Regarding the size of the high-school site the following statement is made:

> There is abundant evidence from experience to prove that no high-school site should be less than 3 acres for the most modest building. Of this space 2 acres are necessary for physical education. Five acres is the minimum for a school of 500 pupils. Nothing short of a 10-acre site will suffice for large schools. And even the school of 500 pupils requires this larger site if it is to include a general athletic field with accommodations for spectators. A 12 to 15 acre site is always desirable. * * * To meet standard requirements as to space, the smallest school should have at least 2 acres for outdoor physical education. This space should include space for baseball, which space will also serve for football. Space for two volley ball games and one playground ball game is recommended. About 100 students in action can thus be accommodated at one time. If the school is to contain more than 600 pupils, the outdoor physical training space should accommodate more than 100 pupils at a time and hence must be enlarged proportionately. A quarter mile running track, pole vaulting, running broad jump, running high jump, standing broad jump, and a spectators' stand wherever included will demand additional space.

In 1923 the following areas were recommended for school sites by Strayer and Engelhardt. For elementary schools there should be 8 acres including the land on which the school is situated; for the high-school buildings, there should be a minimum of 10 to 12 acres.

In 1923 the following standards were suggested at the Annual Conference of the Playground and Recreation Association of America:

For elementary schools.—The minimum total area should be 8 acres including the land on which the school is located.

For intermediate schools.—The minimum total area should be from 10 to 20 acres.

For high schools.—The minimum total area for a high-school site should be from 20 to 40 acres.

In 1924, a study of school and municipal playgrounds was made by Dr. J. F. Rogers, chief of the division of school hygiene and physical education of the United States Office of Education. In that study it was reported that 15 cities had definite standards for school yards which varied from 10 square feet per pupil to 200 square feet per pupil. The fact was also brought out in that study that 67 per cent of the cities throughout the country were providing playgrounds for all new school buildings.

In 1924, a bulletin entitled "The Evaluation and Improvement of School Buildings, Grounds, and Equipment" was published by the Bureau of Educational Research of the College of Education of the University of Illinois. The following statement was made regarding school sites:

In addition to lawns, walks, etc., there should be at least 100 square feet of actual playing space available for each pupil. Two hundred feet are better. In many cases where additional land can not be bought, the playgrounds may be added to by removing sheds and other more or less temporary buildings which have no important uses, by reducing the amount of space devoted to lawns, by preventing the janitor from using portions of the grounds for ash piles, etc., and even by having adjacent streets or alleys closed to traffic.

In 1925 a committee on schoolhouse planning, which had been working for several years under the auspices of the National Education Association, made the following report regarding the essential qualities of a school site:

The location of the building is permanent and involves not only the convenience of the pupils in reaching the building, but also the more important considerations as to the surroundings of the building, its freedom from external noise and odors, and space adequate for outdoor physical education and for future enlargements of the building without encroachment on play areas.

In April, 1926, a national conference on city planning was held in Florida. It was reported at that meeting that there was a trend toward the acquisition of larger sites for schools. In the summer of 1926, the conference sent out an inquiry as to the size of school sites to about 500 cities having a population of more than 15,000 in-

habitants. Replies were received from 270 cities. From the information collected, the following reports were made:

Five acres or more for elementary schools, and 10 acres or more for high schools, whether junior or senior, have been acquired by several cities in each of the following States: California, Georgia, Indiana, Michigan, Minnesota, Ohio, North Carolina, Pennsylvania, Texas, and Wisconsin.

Sixty cities either definitely report a policy of securing for elementary schools 5 acres or more and for high schools 10 acres or more, or the acreage secured indicates such a policy.

The 1927 annual report of the division of physical and health education of the Philadelphia Board of Public Education includes the following standards for new school sites, suggested by the property committee of the Board of Public Education:

For a high school of 4,000 pupils, a play space of not less than 8 acres.

For a junior high school of 2,000 pupils, a play space of not less than 4 acres.

For an elementary school of 1,500 pupils, a play space of not less than 3 acres.

Present legislative requirements.—In many sections of the country the State department of education in cooperation with local boards of education has taken an active interest in providing large areas for school playgrounds.

In a few States laws have been passed requiring that certain definite areas be provided for school sites. In 20 States the rules and regulations of the State boards of education include definite requirements regarding the size and equipment of school yards. Frequently these requirements are included among those made for standardization of a school. In some 36 States the State departments of education recommend certain areas as suitable standards for playgrounds for city and rural schools. Many of these recommendations are for larger areas than those required at the present time. In a few States laws have been passed regarding the maximum and minimum areas which if necessary may be taken by condemnation proceedings when property is needed for a school site.

Among the States in which laws have been passed requiring definite areas for school sites, there is a considerable variation in the amount of land required. For the village and rural schools, there is a tendency to require 1 acre. However, in South Carolina 4 acres may be required for standardization, and in South Dakota 5 acres are required for State consolidated high schools. A brief outline of the educational laws requiring certain areas for school sites in Iowa, Kansas, Minnesota, Montana, Pennsylvania, South Carolina, and South Dakota is presented herein:

Iowa.—It is required that the school yard of a "standard school" contain at least 1 acre. (Authorized by secs. 4360, 4367 and 4377 of Code of Iowa, 1927.)

Kansas.—In regard to the "purchasing or leasing of a school site it is required by law, that such site when not included within the limits of a town or a village, shall not contain less than 1 acre." (School Laws of Kansas, Code of 1927. Chap. XI, sec. 302.)

Minnesota.—It is required that in any village or city, the school site when practicable shall contain at least one block, and if outside of any city or village, 2 acres; and when any schoolhouse site shall contain less than such amount the board shall, if practicable, acquire other lands adjacent to or near such site to make, with such site, such amount. (Laws of Minnesota, relating to the public-school system, 1927, Chap. III, sec. 74.)

Montana.—The school site in districts of the first and second class shall be not less than one-half of an average city block and in districts of the third class, shall contain not less than 1 acre. (School Laws, 1921–22, Chap. XVI, sec. 1600, p. 65.)

Pennsylvania.—A "proper playground" is required by law. The location and amount of any real estate required by any school district for school purposes shall be determined by the board of school directors of such district, by a vote of the majority of all the members of such board: *Provided*, That no new school building shall hereafter be erected without a proper playground being provided therefor. (School Laws of Pennsylvania, sec. 604, art. 5, p. 53.)

South Carolina.—No school shall receive aid under the provision of this act without the approval of the county board of education of the county in which said school shall be situated * * * such school site shall contain 4 acres or more except where for special reasons approved by the State board of education a site of 4 acres can not be procured. (Laws of South Carolina, 1921, sec. 1763, State aid for building schools, p. 52.)

South Dakota.—The school laws of South Dakota include among the standard requirements for State aid, from 1 to 5 acres of land for playgrounds, gardens, and experimental plots.

For the purpose of receiving State aid, a minimum of 1 acre is required of State rural schools; a minimum of 3 acres is required of first-class State consolidated schools; a minimum of 2 acres is required of second-class State consolidated schools; and a minimum of 5 acres is required of State consolidated schools. (The School Laws of South Dakota, 1928, pp. 108–109.)

West Virginia.—County superintendent must approve sites. Many will not approve less than 1 acre.

The board of education of every district and independent school district shall provide by purchase, condemnation, or otherwise, such lands as may be necessary for school buildings, playgrounds, experiments in agriculture, and other educational purposes and shall have authority to make the necessary expenditures for the improvement of such lands. (General School Laws of West Virginia, 1925, sec. 49, p. 22.)

However, in independent districts, no lands may be purchased by any board of education, etc., unless approved by the county superintendent. Many will not approve less than 1 acre.

In California, while there is no legal requirement or State regulation regarding the areas of school yards, under section 1608 of the School Laws of 1927 boards of education are required to provide such materials as are necessary to make teaching effective. Under this section of the law ample provision of school grounds is made throughout the various sections of the State.

In Delaware, "the boards of education of special school districts, and the boards of trustees of school districts, shall file with their biennial school budgets of the year in which there is a legislative session a proposed building program which shall include: (1) Plans for ample, appropriate, and suitable school sites and playgrounds.

(2) Plan for building and equipment." (School Laws of Delaware, 1925, p. 41, Art. VIII, sec. 50.)

Very definite legislation was also included in the State school building act of 1927 in Delaware. "Before any ground is purchased as a site for a new school or for an addition to an existing school, the approval of the State board of education must be secured. Very definite standards as to the areas are included among the State regulations for school yards."

Regulations of State departments.—Among the States in which the rules and regulations of the State boards of education include certain requirements regarding suitable school playgrounds may be mentioned the following: Alabama, Delaware, District of Columbia, Florida, Illinois, Iowa, Kentucky, Maryland, Michigan, Minnesota, Mississippi, Nebraska, New Mexico, New York, North Carolina, Oklahoma, Pennsylvania, Texas, Virginia, and Wyoming.

TABLE 1.—*Number of acres required by regulation of the State boards of education for school playgrounds*

State	Schools				
	Elementary	High	Junior high	Senior high	Rural
1	2	3	4	5	6
Alabama	2–5	2–5	2–5	2–5	2–5
Delaware	[1] 2+				
District of Columbia	3		5–6	([2])	
Florida [3]	([4])		[5] 3	[6] 5	[7] 2–3
Illinois					[8] ½–1
Iowa					
Kentucky [9]					1+
Maryland	2–4	5–12			1+
Michigan					
Minnesota	([10])				2
Mississippi	[11] 1+	[12] 10			[12] 10
Nebraska					[13] 1–2
New Mexico		3	3	3	3
New York	3+	5+	5+	5+	[11] 1+
North Carolina	6	10	10	10	6
Oklahoma	[13] 1				
Pennsylvania [14]	[15] 2		[16] 2		[17] 1–2
Texas					[13] 2–4
Virginia [18]	½–2				½–2
Wyoming					[13] 1

[1] A minimum size of 2 acres plus an additional 250 square feet for each pupil, with a maximum of 10 acres.
[2] 3 or 4 city blocks.
[3] Certain areas are required for standardization. The State department of public instruction recommends certain standards which the State supervisor uses in approving schools.
[4] A standard of 100 square feet per child (in 1928).
[5] 3 acres accepted until 1932.
[6] 5 acres accepted until 1932.
[7] 2 acres for a 1 or 2 room school. 3 acres for 120 pupils and 100 square feet for each additional pupil.
[8] The State department of education requires "ample space" for playgrounds. One-half acre as a minimum and 1 acre for a superior school.
[9] School sites must meet the requirements as to "ample grounds." At least 1 acre. For a school of 150 or more pupils, a minimum of 2 acres.
[10] 50 square feet per pupil.
[11] 1 acre per teacher.
[12] For consolidated high schools.
[13] For standardization.
[14] The law requires a proper playground. All school sites must be approved by the State department of public instruction.
[15] Minimum for small schools is 30 square feet per pupil in all except rural districts.
[16] Minimum for consolidated junior high schools.
[17] 1 acre for small schools is the minimum; 2 acres the minimum for consolidated schools.
[18] To a large extent the cities follow their own regulations.

Legislation for condemning areas.—A few States have laws regarding the maximum areas which school boards may, if necessary, take by condemnation proceedings when property is needed for a school site, In South Dakota 2 acres are allowed as a maximum. In Iowa, Maine, Maryland, New Jersey, North Dakota, and West Virginia 5 acres are allowed as a maximum. In Delaware, Kansas, Kentucky, Nebraska, New Hampshire, and North Carolina, not more than 10 acres may be condemned if needed. In Kansas as many as 40 acres are allowed and in Pennsylvania there is no limitation by law. School boards may purchase or condemn any amount.

A few States have laws which prescribe a minimum or a maximum area which boards of education are allowed, if necessary, to condemn for school property.

Delaware.—Not more than 10 acres may be condemned. (School Laws of Delaware, 1925, Art. VIII, sec. 52, p. 44.)

Iowa.—A 2-acre limitation. School laws with annotations and decisions. (Published by the State of Iowa, 1925, p. 130, sec. 4360.)

A 5-acre limitation for any school corporation, including a city, town, village, or city under special charter. (Sec. 4361.)

Ten acres for a consolidated school district. (Sec. 4362.)

Kansas.—Not more than 10 acres may be condemned. Not more than 40 acres may be acquired without condemnation proceedings. (Revised School Laws of Kansas, 1927, chap. XVII, art. 5, 524, p. 150–51.)

Kentucky.—Any amount necessary may be condemned, not exceeding 10 acres. (Kentucky School Laws, 1925, chap. XIV, sec. 4466. Kentucky Statutes.)

Maine.—School lots not exceeding 5 acres may be condemned. (Laws of Maine Relating to Public Schools, 1925, sec. 3, p. 9, chap. 16.)

Maryland.—No lot taken by condemnation proceedings may exceed 5 acres. (Maryland Public School Laws, 1927, sec. 47, p. 21.) (1916, ch. 506.)

Nebraska.—When a school district desires to locate a schoolhouse on school lands belonging to the State, it shall be permitted to purchase not less than 1 acre, not more than 10 acres, and receive a deed therefor from the State. (Nebraska School Laws as compiled and amended for 1925–26. Art. XVIII, sec. 6496, p. 90.)

New Hampshire.—Not exceeding 10 acres.

New Jersey.—Not exceeding 5 acres. (School Laws of New Jersey, 1925, Art. VII, sec. 126, par. 1, p. 83.)

North Carolina.—Not more than 10 acres. (Public School Laws of North Carolina, Pt. II, art. 5, sec. 61, p. 20.)

North Dakota.—The school board of any district may take in the corporate name thereof any real property not less than 2 acres, nor exceeding 5 acres in area chosen for a site. (General School Laws, 1927, Department of Public Instruction, sec. 1187, p. 42. Schoolhouse sites, how obtained and maximum area allowed.)

Pennsylvania.—No limitation. School boards may purchase or condemn any amount.

South Dakota.—Not exceeding 2 acres. (South Dakota School Laws, 1927 (or 2B), sec. 7496, p. 61.)

West Virginia.—Board may secure by condemnation, quantities up to 5 acres. (P. 25, sec. 49, School Laws of West Virginia, 1929.)

Arkansas.—The school districts in this State are authorized to express the power of eminent domain and to condemn, take, and use private property for use of said school districts, for schoolhouses, or necessary playgrounds or other necessary uses incidental thereto. (Arkansas Laws, Statutes, School Legislation of the General Assembly of 1927.)

Recommendations of State boards.—Among the States in which certain areas are recommended as standards for school playgrounds may be mentioned the following: Alabama, Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington, West Virginia, and Wisconsin.

TABLE 2.—*Number of acres recommended by State boards of education for school playgrounds*

State	Schools				
	Elementary	High	Junior high	Senior high	Rural
1	2	3	4	5	6
Alabama	5	15	10	15	5
Arizona	3–8	5–20	3–5	3–5	3–5
Arkansas	3–5	5–10	4–6	4–6	1–5
California	5+	20+	10+	20+	[1] 5–20
Connecticut	[2] 1+	[2] 1+	[2] 1+	[2] 1+	[2] 1+
Delaware	[3] 2+	[3] 2–10			[3] 2–10
District of Columbia	[4] 3		6	([5])	
Florida	5	10–15	10	20	[6] 3–10
Georgia	4+	8+			4+
Illinois					[7] 1
Indiana	5	10	10	10	2
Iowa	([8])	3–5	([8])	([8])	([9])
Kansas	2				2
Kentucky	[10] 1+				[10] 1+
Louisiana	[11] 5	[11] 5	[11] 5	[11] 5	[11] 5
Maine	([8 12])	([8 12])	([8 12])	([8 12])	([8 12])
Maryland	([13])	([13])			
Massachusetts	([14])	6–15	5–8	6–15	
Michigan		([15])			[16] ½–1
Missouri	5	10	8	10	2

[1] Same requirements as for city schools.
[2] "Ample space." 1 acre is recommended as a minimum.
[3] The site should contain a minimum of 2 acres plus an additional 250 square feet for each pupil; 10 acres is the maximum.
[4] Or 50 square feet per pupil.
[5] 4 city blocks.
[6] 3 acres for a 2-room school, 4 acres for a 3-room school, and 10 acres for a consolidated school.
[7] For standard schools.
[8] Ample space is recommended.
[9] About 1 acre.
[10] 1 acre for a 1-room school and 2 acres for a 3-room school. For a school of 150 pupils, not less than 2 acres.
[11] All school-building plans must be submitted to the State board of education; 5 acres are usually recommended as a minimum site unless this is financially impossible.
[12] Schools throughout the State have been provided with large playgrounds.
[13] In Maryland 2 to 4 acres are required for elementary schools and 5 to 12 acres are required for high schools. No additional recommendation is made.
[14] 100 square feet per child.
[15] All high schools should have an athletic field.
[16] A school site should contain at least an acre of land; 2 acres would be better.

TABLE 2.—*Number of acres recommended by State boards of education for school playgrounds*—Continued

State	Schools				
	Elementary	High	Junior high	Senior high	Rural
1	2	3	4	5	6
Montana	5	10	10	10	[17] 1–5
Nebraska					2
Nevada [18]					
New Jersey	2–4		8–12	12	[19] 2
New Mexico	3	3	3	3	3
New York	([20])	([20])			
North Carolina	6	10	10	10+	6
North Dakota	2–5	2–5	2–5	2–5	2–5
Ohio	3–5	5–10	5–10	5–10	1–2
Pennsylvania	([21])				2–5
South Carolina	4	4	4	4	4
Tennessee	2				2
Texas	5–12	8–15	8–15	10–25	2
Vermont	([22])	([22])			
West Virginia	[23] 1				1
Wisconsin	([24])	([25])	([26])	([8])	[27] 1
Outlying Parts of the United States					
Guam	¼–2				½–2
Virgin Islands	1	1	2	2	2

[17] According to the size of the school.
[18] Local authorities decide problems of this type, and make recommendations.
[19] 150 square feet of play space per pupil, or 2 acres for a 1-room school, 3 acres for a 2-room school, and 4 acres for a 3-room school.
[20] In addition to the areas required by regulation of the State board of education, it is recommended that the playground be developed to provide definitely the necessary space and equipment for football, base ball, tennis, swings, slides, etc.
[21] 30 square feet per pupil is the minimum. Ample space should be provided for future development.
[22] As generous as possible for all schools.
[23] 1 acre is the minimum.
[24] 10 square feet per pupil.
[25] An ample athletic field.
[26] 15 square feet per pupil.
[27] An acre is the minimum. 1½ to 2 acres for a 2-room school.

II. Playground Layouts and Equipment

Planning the layout.—Along with the general recognition of a certain amount of play space as an essential part of school equipment has come the necessity of a proper arrangement and distribution of the entire area in order that there will be available suitable and ample play facilities for the children of the various ages and grades throughout the entire school. In general, a more advantageous layout of the entire site will be possible if due consideration is given to the arrangement of the buildings, of the walks, and of the school gardens, in their relation to the special layouts for the various play activities.

Carefully laid-out walks may be useful in separating the various areas rather than obstructing the spaces needed for the various games. The locations of the school gardens and the play space for the very small children may be selected so that they will be a safe

distance from the areas used by the older boys or girls for ball games. The division of the entire amount of space and the number of special fields or courts planned should be made, according to the total school enrollment and the ages of the children.

In general, many of the State departments of education advocate that the entire play area of an elementary school should be divided into separate play areas for boys, for girls, and for small children. Among the States in which the aforementioned division is advocated may be listed: Arizona, Arkansas, California, Florida, Illinois, Iowa, Massachusetts, Mississippi, North Carolina, North Dakota, Ohio, South Dakota, Tennessee, Texas, Vermont, Virginia, and West Virginia.

In Florida equal play areas for boys and girls are advocated. In North Carolina, one-half of the entire space for boys, one-fourth for girls, and one-fourth for small children is a common assignment. In Rhode Island and several other States while no State regulations or suggestions have been issued, some kind of division of play areas is usually found throughout the State.

Regulations and suggestions pertaining to equipment.—In some States, the departments of education include in their rules and regulations certain lists of suggested equipment for school yards. Frequently, it is required that some four or five pieces of apparatus should be provided. However, on the whole, there is a tendency to advocate extensive play areas and simple inexpensive apparatus. A recent pamphlet published by the State Department of Education of Arkansas, contains the following statement:

> It is far better to provide for organized games than to buy expensive apparatus. * * * A few dollars spent on volley ball or cage ball will provide physical exercise for 20 or 30 children, while large pieces of apparatus care for only about half of this number.

According to the School Ground Improvement Bulletin, published by the State Board of Education of Connecticut, the essentials for making a playground an educational institution are the children, the teacher, and space.

In Illinois, the State supervisor of rural schools recommends that a one-half-acre playground of a small rural school should consist principally of an open level space.

In Kansas the requirements for standardization of playgrounds include the provision of well-drained playgrounds adapted to play and equipped with at least three pieces of apparatus. Layout and equipment for games such as dodgeball, tennis, croquet, horseshoes, playground ball, basketball, soccer, and football are recommended.

In Kentucky it has been suggested that "The improvement and care of the school grounds is probably a problem not only for the pupils but also for their parents * * *. Under wise leadership, the

entire community will respond readily and the very worst kind of grounds can be greatly improved without cost."

In Louisiana, state-approved high schools are required to make provisions for basketball, baseball, football, tennis, volleyball, and track.

In Maryland, the State Board of Education requires definite provision for baseball, kick-ball, bean-bag games, and space for several running games. In addition, play apparatus for the small children such as sandboxes, seesaws, swings, and blocks must be provided.

During the past year, a committee of 17 recreation executives, under the direction of the Playground and Recreation Association of America, has been making a study of standards in playground apparatus. A preliminary report was made which represents the opinion of the majority of the committee members in regard to selecting apparatus for playgrounds. The committee has also suggested that special studies should be made in regard to the popularity of the various kinds of apparatus, and the number of accidents occurring on different pieces of apparatus. A few excerpts of this report are included below:

There is a considerable difference of opinion as to the relative merits of the various kinds of playground apparatus and many recreation executives believe that only a minimum amount of apparatus should be installed.

Perhaps the most important value of playground apparatus is that it provides an outlet for the well-known play interests of children, such as climbing, swinging, hanging with hands and feet, sliding and balancing, and also a means of enjoying various kinds of motion. In selecting apparatus for a given playground it is advisable to include the types which serve the various outstanding play interests. Apparatus that has a biological appeal will be found most valuable, although that which provides fun as well as that which has definite developmental possibilities should receive consideration.

Some of the factors that may influence the decision to include or omit a certain piece of apparatus on a given playground are the size of the area, the trained leadership available, intensity of use, and the ages and interests of the children using it. Certain apparatus might be installed in a park or municipal playground that would not have a place on a school playground used primarily in connection with the physical education program. In the case of a large playground it may be advisable to install a set of traveling rings, for example, although in a limited area this piece of apparatus should perhaps be omitted altogether or the circular type of traveling rings be used. Some types of apparatus, such as the slide, may be safely used with comparatively little supervision, whereas apparatus of the gymnastic type, such as the parallel bars, requires careful and expert supervision. Climatic conditions are also a factor, and such riding apparatus as swings and the merry whirl is much more popular with children in the Southern States, especially in the summer, than the slide, giant stride, horizontal bar, etc.

Where limited funds make it possible to purchase only a few pieces, it is advisable to select apparatus which will accommodate the largest numbers. A slide, for example, offers greater service than a set of swings, although it does not accommodate as wide an age group. If the playground is in a neighborhood where people are interested in gymnastics, or if it is to be used by school children

in connection with the physical education program, more apparatus of gymnastic type such as the horizontal bar, flying rings, etc., may well be introduced than in the park or community playground where this type of apparatus might receive little use. It is apparent that the ages of the majority of the children using a given playground are a factor in determining the selection of apparatus. The slide, swings, and sand boxes appeal especially to the younger children, whereas such apparatus as the horizontal bar, giant stride, and traveling rings are more popular with the older ones. Experience has shown that apparatus that is of the best construction is most satisfactory and cheapest in the long run.

The following brief comments regarding several of the most common types of apparatus were also included in the aforementioned report:

Swings.—Very popular with children from 3 to 12 years or older, both boys and girls. Has considerable muscular development value, teaches confidence and has social value due to taking turns. Chair swings are recommended for preschool age children and 10 to 12 feet high frames for older children. In almost universal use.

Slides.—Very popular with children 3 to 12 years, both boys and girls. Has some muscular development value and serves many children in quick rotation. Kindergarten slides 3 to 4 feet high for preschool children and 8 feet high slides (about 16 feet long) for older children. Under certain conditions higher slides with safety platforms may be used, but are not recommended for the average playground. The slide is in almost universal use.

Sand box.—Probably the most popular feature of playground for preschool children—also used by older children to lesser degree. Should be on every playground. Desirable to have two boxes, one for small children and the other for modeling by older children. Sand boxes should have shelter above them, either tree, roof, or awning, and also a cover to be put on when not in use.

Low-climbing apparatus.—Comparatively new type of apparatus. Very highly recommended by school and playground workers who have used it. Popular with boys and girls of wide range of ages, and a certain type accommodates a large number at one time. Has both muscular development and recreative values.

Horizontal ladder.—Popular with boys and girls of elementary school age. On many playgrounds. Reasonably safe and has considerable value in physical development. Should be from 6½ to 7½ feet high.

Horizontal bar.—Popular with boys and to a lesser extent with girls. Valuable for physical development and for stunt use. Desirable to have height adjustable or to have more than one bar of different heights provided, at least for boys.

Giant stride.—Popular with both boys and girls 8 years or older. Has muscular development values. Considered too dangerous by some workers, but danger can be reduced by using knotted ropes or aluminum handles, by instructing boys and girls in its use, and by providing careful supervision. Considered standard apparatus in many cities.

Traveling rings.—Popular with older boys, and to a lesser extent with older girls. Has considerable muscular development value. New circular type has replaced the line type in many cities since it requires less space and in some cities is considered a substitute for giant stride.

Balance beam.—This simple apparatus, easily constructed, has value in developing poise and balance. Is considered especially valuable for girls and is used in various physical efficiency tests.

Seesaws.—Found on many playgrounds and on the recommended list, although many recreation executives do not approve its use. Popular with the younger

children. It is important to have the fulcrum low—not more than 22 inches above ground.

The following list of apparatus is recommended as the minimum standard for the average playground. The standard suggested is not intended to serve primarily the special requirements of a school physical education program, although to a considerable extent it will meet these needs in addition to providing apparatus of the playground or fun type. It is recognized that it will often be necessary to adapt the standard to meet local conditions and special needs. The apparatus listed, however, is believed to include the various types having the greatest value.

Standards are suggested for the use of both the preschool children and those of elementary school age. One set of apparatus will serve the latter group in most communities, but standards are also suggested for the guidance of communities where it is considered desirable to provide separate apparatus for different groups of school age. The minimum standards recommended are:

For preschool age children (under 6 years):
- Chair swings (set of 6).
- Sand box (in 2 sections).
- Small slide.
- Simple low-climbing device.

For children of elementary school age (6 to 12 years and older):
- Swings, frame 12 feet high (set of 6).
- Slide, 8 feet high (approximately 16 feet long).
- Horizontal ladder.
- Traveling rings or giant stride.
- Balance beam.
- Seesaws (set of 3 to 4).

Optional—if available funds, space, and attendance justify:
- Horizontal bar.
- Giant stride or traveling rings (whichever is not provided above).
- Low-climbing device.

In case boys and girls of school age are to be separated on the playground and separate apparatus is to be provided for each of the sexes, the apparatus recommended in the standard should be installed for each group except that the horizontal bar may be omitted from girls' section and the balance beam from the boys'. When two sets of apparatus are to be provided for the children of school age, one for all girls and for boys up to 10 years old, the other for boys above 10 years, practically the same types should be provided as when all the boys and girls are separated, except that the climbing device may be omitted from the older boys' section.

Space requirements for games.—The problem of determining the total amount of land required, along with the varied layout necessary for an adequate school playground, is largely one of projecting a layout which will be ample for the regular school program of physical activities, along with the recess and after-school activities. For the older schools the best use possible should be made of the facilities available. For the newer schools careful planning should be done in advance.

A brief circular of information regarding space requirements for various games published by the Playground and Recreation Association of America may be used as a kind of score card in the matter of

planning playground facilities. The circular not only contains the dimensions of special layouts, but also suggests the dimensions of additional space required for players when games are in progress, or necessary for separation of the various areas for games.

TABLE 3.—*Space requirements for organized games and sports published in a recent circular by the Playground and Recreation Association of America*

Name	Dimensions of play areas	Use dimensions	Space required (square feet)	Number of players
1	2	3	4	5
Baseball	75-foot diamond	250 by 250 feet	62,500	18.
Basket ball	35 by 60 feet	50 by 75 feet	3,750	10 to 12.
Clock golf	Circle 20 to 24 feet in diameter.	Circle 30 feet in diameter.	706	Any number (4 to 8).
Croquet	30 by 60 feet	30 by 60 feet	1,800	Do.
Field hockey	150 by 270 feet	150 by 330 feet	49,500	22.
Football	160 by 360 feet	180 by 420 feet	75,600	Do.
Handball	20 by 30 feet	35 by 40 feet	1,400	2 or 4.
Horseshoe pitching stakes	30 feet apart	10 by 40 feet	400	Do.
Paddle tennis	18 by 39 feet	26 by 57 feet	1,482	Do.
Playground ball	45-foot diamond	125 by 125 feet 100 by 100 feet	15,625 10,000	20.
Soccer	150 by 300 feet	150 by 360 feet	54,000	22.
Tennis	27 by 78 feet (single) 36 by 78 feet (double)	50 by 120 feet	6,000	2 or 4.
Tether tennis	Circle 6 feet in diameter.	20 by 120 feet	400	2.
Volley ball	25 by 50 feet	40 by 60 feet	2,400	12 to 16.

A recent publication, Play Areas: Their Design and Equipment, prepared by Playground and Recreation Association of America, contains detailed information and practical suggestions regarding location, size, grading, drainage, surfacing, fencing, lighting, water, paths, and maintenance of playgrounds; common types of apparatus and suggestions for their use; pools, structures, equipment, and supplies; layouts for games and sports; the children's playground; neighborhood play fields; the athletic field; beautification of play areas; preparation of play areas for winter use; homemade apparatus; an appendix regarding the engineer's problems; and a very helpful bibliography.

A recent survey of the city schools of Berkeley, Calif., attempted to determine whether the playgrounds provided ample space and equipment. The complete physical education program of all of the children in school was projected and expressed in land values. Then a comparison of these land values with the facilities available in the schools at that time was used to indicate whether additional land was needed, and if so, what kind of layouts should be provided and for what age of children.

The following charts and descriptive explanation were used in connection with the Berkeley survey. They are presented in the hopes that they may be suggestive to other city boards of education in determining the amount of space and special layouts required for school yards.

In the following two tables are presented plans for checking the playground space and equipment for elementary and junior high schools. On the left margin is a list of facilities required for carrying out a well-balanced plan of free play and physical training. The items listed call for certain ground areas as indicated in columns 2 and 3. Naturally many of these areas can be used for purposes other than those noted in column 1. In column 4 is shown the maximum number of children for which each of these units provides at any given time. For elementary schools there are 12 units of play space listed. These areas are suited to 12 (or more) activities which, together would provide what physical education authorities regard as a suitable collection of activities for the physical and social development of children. A playground provided with 1 each of these 12 units would provide suitable play activity for a maximum of 215 children if all areas were filled at one time. This would be a total of 39,368 square feet, or 183.1 square feet per pupil. If but 100 square feet per pupil were available, then we would have but 21,500 instead of 39,368 square feet. This would eliminate 45 per cent of the space called for by this scheme of instruction and so, substantially abbreviate the training possibilities.

It will be noted in the third from the bottom line of these tables that the number of square feet per pupil required is in all different sized schools well above 100. It must be kept in mind that this refers to the maximum number of pupils actually using the grounds at any time given and not to the total enrollment. In a school of 1,000 pupils the number on the grounds at any given time will rarely exceed 500. Accordingly, this standard is not higher than the old standard of 100 square feet per pupil. If we assume that the number on the playground is half the school enrollment, then the figure here showing the square feet per pupil would be divided by 2, in which case it is evident that this standard calls for less than 100 square feet per pupil. This assumes that we have a maximum load on the grounds. Of course there is often less than a maximum load, in which the per pupil square footage would be higher.

To illustrate the actual working of this standard, let us take a school with 100 pupils. By this standard this would call for 42,518 square feet of land, or 425 square feet per pupil. However, this amount of land could care for 245 pupils at one time. If this is half the enrollment then the 42,518 square feet would provide proper play facilities for a school of 490 pupils. This would be slightly less than 87 square feet per pupil. Again, a school of 2,000 pupils would have a demand for play space of 1,000 pupils. This would call for 150,625 square feet of area, or 150.5 square feet per pupil on the ground, or 75.3 square feet per pupil enrolled in the school. This would be assuming that the school had all the pupils necessary to provide a maximum playground load. This same 150,625 square feet would be necessary for a school of 1,900 pupils. With this enrollment the standard would call for almost 80 square feet per pupil.

In some cases, however, this plan would call for slightly more than 100 square feet per pupil. The maximum load on a playground of 55,056 square feet would require only 69 square feet per pupil. This maximum, however, is the minimum load for a playground of 87,930 square feet, or 109 square feet per pupil. Thus, this schedule would in some few instances (when only a minimum load of pupils is available) call for slightly more than 100 square feet per child.

In general, however, it will be seen that this standard is more conservative than the old standard, except when the school is very small and when it is passing from one to another group of requirements. A school of 100 pupils needs a baseball field, but this same field will serve a school of 800 pupils.

It is conceivable that the nominal playground load will be found to be more than 50 per cent of the enrollment in some schools. If so, this method will require more ground than is here suggested.

TABLE 4.—*Area and equipment required for physical training activities for 6-grade elementary schools of various sizes* [1]

Standard equipment and facilities	Unit dimensions, feet [2]	Unit area, square feet	Pupils accommodated per unit at one time	Number of units of area or equipment, and square feet of area needed for schools with playground load of the following numbers of pupils [3]																	
				100 to 200		200 to 300		300 to 400		400 to 500		500 to 600		600 to 700		700 to 800		800 to 900		900 to 1,000	
				Units	Area	Units	Area	Units	Area	Units	Area	Units	Area	Units	Area	Units	Area	Units	Area	Units	Area
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Field for tag and miscellaneous running games	40 by 80	3,200	40	1	3,200	1	3,200	3	9,600	4	12,800	5	16,000	6	19,200	7	22,400	8	25,600	9	28,800
Field for soccer and playground baseball diamonds.	120 by 220	26,400	25	1	26,400	1	26,400	1	26,400	2	52,800	2	52,800	2	52,800	2	52,800	2	52,800	3	79,200
Volley-ball court	35 by 70	2,450	20	1	2,450	1	2,450	2	4,900	2	4,900	2	4,900	3	7,350	3	7,350	4	9,800	4	9,800
Basket-ball court	45 by 70	3,150	30	2	6,300	2	6,300	2	6,300	3	9,450	4	12,600	4	12,600	5	15,750	5	15,750	6	18,900
Handball—double court	30 by 60	1,800	10	1	1,800	1	1,800	2	3,600	2	3,600	2	3,600	3	5,400	4	7,200	4	7,200	4	7,200
Traveling rings	15 by 50	750	15	1	750	2	1,500	2	1,500	2	1,500	2	1,500	2	1,500	2	1,500	2	1,500	2	1,500
Flying rings	12 by 20	240	5	1	240	2	480	2	480	2	480	2	480	3	720	3	720	4	960	4	960
Horizontal ladder	10 by 25	250	15	1	250	2	500	2	500	2	500	2	500	2	500	2	500	2	500	2	500
Horizontal bars	12 by 27	324	15	1	324	2	648	2	648	2	648	2	648	3	972	4	1,296	4	1,296	4	1,296
Jumping standards and pits	10 by 12 6 by 20	240	20	1	240	1	240	1	240	1	240	2	480	2	480	2	480	3	720	3	720
Low horizontal bars	12 by 27	324	15	1	324	2	648	2	648	3	972	3	972	3	972	3	972	4	1,296	4	1,296
Low flying rings	12 by 20	240	5	1	240	1	240	1	240	1	240	2	480	2	480	2	480	2	480	2	480
Total		39,368	215	----	42,518	----	44,406	----	55,056	----	87,930	----	94,960	----	102,974	----	111,448	----	117,902	----	150,652
Square feet per pupil				----	173.5	----	143.2	----	131.0	----	165.9	----	151.9	----	144.0	----	137.5	----	129.5	----	149.9
Acres				----	0.97	----	1.01	----	1.26	----	2.01	----	2.17	----	2.36	----	2.55	----	2.70	----	3.45
Number of pupils accommodated, noon lunch.				----	245	----	310	----	420	----	530	----	625	----	715	----	810	----	910	----	1,005

[1] Assuming organization of all children at one time for physical education class assignment. Such organization must include leadership by teachers and selected pupils in accordance with a carefully arranged plan to secure sufficient activity for every pupil.

[2] Unit dimensions include the minimum space necessary for margins about apparatus and courts.

[3] A playground load of 100 pupils would mean a school of 200 pupils.

TABLE 5.—*Area and equipment required for physical activities for junior high schools of various sizes*[1]

Standard apparatus, court, and playing field units	Unit dimensions, feet	Unit area, square feet	Pupil accommodation per unit at one time	Number of units of areas or equipment, and square feet of area needed for schools with playground load of the following numbers of pupils—							
				Fewer than 500		501 to 750		751 to 1,000		1,001 to 1,250	
				Units	Area	Units	Area	Units	Area	Units	Area
1	2	3	4	5	6	7	8	9	10	11	12
Outdoor:											
Field for soccer, pass ball, playground, baseball, field, and track	360 by 210	75,600	80	1	75,600	1	75,600	2	151,200	2	151,200
Volley-ball court	35 by 70	2,450	20	2	4,900	4	9,800	4	9,800	6	14,700
Basket-ball court	45 by 70	3,150	12	2	6,300	4	12,600	4	12,600	6	18,900
Hand ball—double court	30 by 60	1,800	8	2	3,600	2	3,600	2	3,600	4	7,200
Tennis court	55 by 115	6,325	4	4	25,300	4	25,300	4	25,300	6	37,950
Horizontal bars	12 by 27	324	10	1	324	1	324	2	648	2	648
Horizontal ladder	10 by 25	250	10	1	250	1	250	2	500	2	500
Traveling rings	15 by 50	750	5	2	1,500	2	1,500	2	1,500	2	1,500
High jump pit	10 by 12	120	10	1	120	1	120	1	120	2	240
Broad jump pit	6 by 20	120	10	1	120	1	120	1	120	2	240
Total outdoor area		90,889	169	-------	118,014	-------	129,214	-------	205,388	-------	233,078
Indoor:											
Exercise floor	40 by 70	2,800	40	1	2,800	1	2,800	2	5,600	2	5,600
Room for corrective gymnastics	20 by 30	600	20	0	0	1	600	1	600	1	600
Rest room	20 by 30	600	20	1	600	1	600	1	600	1	600
Swimming pool	40 by 90	3,600	30	0	0	0	0	1	3,600	2	7,200

[1] Assuming the organization of one-half of the children at one time in physical training activities. Since all work in the junior high school is departmentalized, the peak load on the playground and in the gymnasium does not come during the regular instruction period, but during the noon hour. Experience shows that facilities should be ample to permit of the organization of one-half of the enrollment in physical activities during the noon hour.

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The merits of the plan of measurement here presented, however, are not mere saving of cost for land but, rather, in the fact that it judges a playground in terms of the educational service it is possible to get from it.

The junior high school plan is explained in a similar way. The scale of measurement is set forth in the table for schools of different sizes.

These measures were applied as follows: A map of the district was prepared showing the amount and form of the play area. Cardboard forms, cut to the map scale, were prepared for each of the areas called for in the schedule. These forms were then laid down on the school map. Also check was made of the placement of apparatus and the arrangement of the various areas on each of the grounds.

III. Use of Playgrounds After School Hours

Control of school property.—In general, the control of all school property, including the buildings and grounds, is invested by law in the local school trustees or boards of education, in the district trustees or district boards of education, and occasionally in the county school trustees or county boards of education. Permission for the use of the school grounds by any persons or agency must be secured from the aforementioned authorities.

The control of school property is invested in the local district board of education or local trustees in the following States: Alabama, California, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Texas, Vermont, and the District of Columbia. In Maryland the county boards of education have control. In Nebraska, while no laws have been passed, it is customary for the voters, assembled in lawful manner, to determine the use of school property.

Legislation pertaining to after-school use of playgrounds.—Since 1915 a large number of States have passed specific legislative enactments enabling municipalities to establish and maintain systems of public recreation. In some States special legislation has been enacted permitting the use of school property during after-school hours by outside agencies not only for recreational activities for children but also for adults. In other States, these legislative enactments permit school boards to establish and maintain community recreational activities on school property during after-school hours.

In a few States these enactments permit school boards to cooperate with municipal agencies in establishing and maintaining community recreational activities on school property.

Legislative enactments, permitting the use of school playgrounds during after-school hours by outside agencies for recreational purposes have been passed in the following States: California, Idaho, Indiana, Iowa, Maryland, Massachusetts, New Jersey, New York, Ohio,

Oklahoma, Pennsylvania, Rhode Island, South Dakota, Virginia, Washington, and West Virginia.

Legislative enactments, permitting school boards to establish and maintain recreational activities during after-school hours for school children and adults have been passed in the following States: California, District of Columbia, Illinois, Indiana, Kansas, Kentucky, Michigan, New Jersey, Ohio, Oklahoma, Utah, West Virginia, and Wyoming.

Legislative enactments permitting local school boards to cooperate with municipal agencies in establishing and maintaining community recreational activities during after-school hours on school property have been passed in the following States: Connecticut, District of Columbia, Indiana, Massachusetts, Michigan, New Jersey, Pennsylvania, and Rhode Island.

A brief outline of State legislative enactments regarding the use of school property along with a tabular summary of this information follows:

Alabama.—The responsibility for the use of school property is delegated to the local board of trustees for any public use, at their discretion. (Alabama School Code, 1927, p. 63, sec. 187, Art. VIII.)

California.—Boards of school trustees and city boards of education are authorized "to grant the use of school buildings or grounds for educational or recreational meetings." (School Law of California, 1927. Part III, Title III, Chap. III, Art. VII, sec. 1613, p. 115.)

Connecticut.—Any town school committee may cooperate with municipal agencies in maintaining recreational activities.

Any city, town, or borough may establish, maintain, and conduct public parks, playgrounds, baths, swimming pools, gymnasiums, recreation places, and public gardens; may acquire by gift, purchase, lease, or otherwise, land and property necessary thereto; may raise money by taxation or by special bond issue therefor; may appoint and authorize a commission or committee to purchase or lease such land and property on behalf of such city, town, or borough; and may provide by ordinance or by-law for the proper equipment, management, and conduct thereof. (Connecticut School Doc. No. 5, 1922. Laws relating to schools. Chap. 29, sec. 365, p. 145.)

The common council of any city, the selectmen of any town, or the warden and burgesses of any borough, may authorize any person or corporation to provide, establish, equip, or maintain public parks, playgrounds, baths, swimming pools, gymnasiums, recreation places, or public gardens within such city, town, or borough, subject to such conditions, restrictions, and supervision by or on behalf of such city, town, or borough as the common council, selectmen, or burgesses may, by ordinance or otherwise, provide for, and such parks, playgrounds, baths, swimming pools, gymnasiums, recreation places, or gardens so provided and maintained shall, so long as the same are maintained and conducted in accordance with such conditions and restrictions and subject to such supervision as may be imposed as hereinbefore provided, be deemed in all respects to be provided and conducted by such city, town, or borough. (Connecticut School Doc., No. 5, 1922. Laws relating to schools. Chap. 29, sec. 366, p. 145.)

Any two or more cities, boroughs, or towns or any city or borough and town, may jointly acquire property for, operate and maintain playgrounds, playfields, gymnasiums, public baths, swimming pools, or indoor recreation centers. Any town school committee shall have power to join with any city or borough in equipping, operating, and maintaining playfields, gymnasiums, public baths, swimming pools, or indoor recreation. (Chap. XXVIII, sec. 370, p. 147. Connecticut School Doc. No. 5, 1922.)

District of Columbia.—The board of education cooperates with the municipal playground department in granting the use of all grounds not needed for summer schools or for regular classes. Through its community center department, it also permits the use of school buildings and grounds, during after-school hours. In this regard two special committees have been appointed by the board of education.

There is a special committee on the community use of buildings, which has charge of the use of school buildings and premises by community centers and all organizations outside of the schools. This committee formulates all rules and regulations for the use of public-school buildings or property and submits such rules and regulations for the approval of the board of education.

There is also a special committee on athletics and playgrounds. This committee has supervision over all matters relating to athletics and playgrounds of the public schools. It has charge of the selection and laying out of the athletic fields and playgrounds under the jurisdiction of the board of education. (By-laws and rules of the Board of Education of the District of Columbia, 1926, Chap. XV, pp. 56–57.)

Florida.—While there are no laws or regulations regarding the use of school yards during after-school hours, the State department of education advocates a cooperation between the municipal recreation boards and the boards of education. The teachers are required to supervise the playground activities of the elementary schools during after-school hours. (Standards for the Florida Elementary Schools, July 1, 1928, p. 9.)

Georgia.—Local school boards have control of all school property at all times. (Sec. 84, Georgia School Code, 1928.)

Board of education may allow the use of school buildings or school grounds after the regular school hours and during vacation as community centers for the promotion of play and other healthful forms of recreation, under such rules and regulations as to them seem proper. (The Georgia Code, 1926. Complete Annotations. Art. 10 D. Sec. 1551 (205), p. 335.)

Additional legislation has been enacted permitting any school board to cooperate with municipalities in conducting a system of recreation. Municipalities and school boards may join in conduct and maintenance. Any two or more municipalities may provide, establish, maintain, and conduct a recreation system and acquire property for and establish and maintain playgrounds, recreation centers, and other recreational facilities and activities. Any school

board may join with any municipality in conducting and maintaining a recreation system. (Georgia School Code, 1926. Annotated. Chap. 9, sec. 913 (3), p. 197.)

Idaho.—Control of all playgrounds is delegated to local boards of school trustees. These boards "have the power and it is their duty, not only to provide playgrounds, but also to make regulations regarding their use by pupils of their district and others than the pupils of their districts." (School Laws of Idaho, 1921, p. 29, sec. 47. Additional powers of board of trustees of all school districts in the State.)

Illinois.—Generally the use or nonuse of school grounds during after-school hours and on Saturdays is left to the discretion of local boards of education. Special legislation has been enacted which pertains only to cities having a population of 100,000 or more and hence only affects Chicago. Same is as follows:

An act to provide for the control, maintenance, and operation of playgrounds by boards of education in cities having a population exceeding 100,000 inhabitants.

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly,* That the board of education in any city having a population exceeding 100,000 inhabitants shall take control and management of all public playgrounds now owned or hereafter acquired by any such city, which are adjacent to or connected with any public school in such city and shall equip, maintain, and operate the same for the moral, intellectual, and physical welfare of the children and persons using them; the title to all lands occupied as such playgrounds shall vest in and be held by such city in trust for the use of schools: *Provided, however,* that nothing herein contained shall prevent any such city from owning and operating parks, bathing beaches, municipal piers, and athletic fields as is now or may hereafter be provided by law. (School Law of Illinois, Cir. No. 225, p. 169, issued 1928.)

Indiana.—Special legislation has been enacted regarding the establishment of public playgrounds and recreation centers in cities of the first class, in cities of the third, fourth, and fifth classes, and in towns. According to these enactments, the local boards of school trustees may establish and maintain recreation centers or they may cooperate with other agencies. They may permit the use of any public-school grounds or buildings, under their control, as may be required or adaptable for playgrounds and recreation purposes. (School Laws of Indiana relating to the Public-School System, 1927, 317 b, c, and d, p. 152.)

Iowa.—Limited legislation has been enacted whereby "the board of directors of any school corporation may authorize the use of any schoolhouse and its grounds, within such corporation and not within the limits of a town or city," for use outside of school hours by outside agencies. (School Code of Iowa, 1925, sec. 4371, p. 134.)

Kansas.—Local school boards are empowered by law to establish and maintain playgrounds on the public-school grounds.

School boards and boards of education in all cities in Kansas are authorized to purchase or lease playgrounds for public recreation places and playgrounds, and

to establish and maintain for children on such grounds and in the public-school buildings and on the public-school grounds, under the custody and management of such school boards or boards of education, public recreation places, and playgrounds and necessary accommodations for the same. Such school boards or boards of education are also hereby authorized to cooperate with the officers having the custody and management of public buildings and public parks and other public grounds in such cities, and by making satisfactory arrangements with such officers to provide for the supervision, instruction, and oversight necessary to carry on public educational and recreational activities as described in this section in such buildings and upon such parks and grounds. (Revised School Laws of Kansas, 1927, Chap. VI, Art. 2, Sec. 136, p. 41.)

Furthermore, school boards and boards of education in all cities of the State were authorized in 1927, to levy a tax not exceeding in any one year one-fourth of 1 mill on the dollar on all personal, mixed, and real property, within such cities, taxable according to the laws of the State of Kansas, for the purpose of paying the cost of the activities mentioned in the preceding paragraph. "Such tax shall be levied at the same time and in the same manner, and collected and disbursed by the same officers as other taxes levied by such school boards and boards of education." (School Laws of Kansas, 1927, Chap. VI, art. 2, sec. 137.)

Kentucky.—The local boards of education may allow the use of school buildings and grounds after regular school hours and during vacations as community centers for the promotion of play and other healthful forms of recreation under such rules and regulations as to them may seem proper. (Kentucky School Laws, 1926, Chap. II, sec. 205a–13, p. 18.)

Maine.—The law places school property in the hands and under the jurisdiction of the local superintending school committee. This committee has the right to determine whether or not playgrounds shall be used for community purposes. (School Laws of Maine, Relating to Education, 1925, Chap. XVI, sec. 37, p. 21.)

Maryland.—County boards of education have control over the use of school grounds during after-school hours. (P. 42, secs. 68–69, Chap. V, Maryland School Laws, 1927.)

Massachusetts.—Liberal use of school equipment is encouraged when not in use by the school. Special legislation was enacted in 1923 which applies to the entire State except Boston.

Public use of school property.—For the purpose of promoting the usefulness of public-school property the school committee of any town may conduct such educational and recreational activities in or upon school property under its control, and subject to such regulations as it may establish and constantly and without interference with the use of the premises for school purposes, shall allow the use thereof by individual and associations for such educational, recreational, social, civic, philanthropic, and like purposes as it deems for the interest of the community. The use of such property as a place of assemblage for citizens to hear candidates for public office shall be considered a civic purpose within the meaning of this section. (This section shall not apply to Boston.) (Massachusetts General Laws, Relating to Education, 1927, p. 26, chap. 71, sec. 71.)

Michigan.—The school board of any district, by law, has power to permit the use of school grounds for recreational activities for school children and also for adults. The school boards of each district prescribe the rules regarding the use of school property.

Any school district may operate a system of public recreation and playgrounds; acquire, equip, and maintain land, buildings, or other recreational facilities; employ a superintendent of recreation and assistants; vote and expend funds for the operation of such system; or may cooperate with any city, village, county, or township in the operating and conducting of such system in any manner in which they may mutually agree; or they may delegate the operation of the system to a recreation board created by any or all of them and appropriate money, voted for this purpose, to such board. (General School Laws of Michigan, 1927, chap. 20, par. 459, Sec. VII, p. 130.)

Minnesota.—Local school boards have charge of all school property.

The school board shall have general charge of the district and of the schoolhouses and the interests of the schools thereof. (School Laws of Minnesota, 1927, Chap. III, sec. 74, p. 24.)

Nebraska.—In the absence of any law or court decision regarding the right to determine whether school property may be used for other than school uses, this right is left with the voters of the district when assembled in a lawful manner. (P. 81, sec. 6330, School Laws of Nebraska, 1927–28.)

Nevada.—Local school trustees have entire control and management of school property. There are no specific laws or regulations regarding the use of school grounds. (School Laws of Nevada, 1927. Chap. VI, sec. 67, p. 30.)

New Jersey.—In general the local boards of education in each district have charge of the use of school grounds during after-school hours for recreational purposes.

In 1919 legislative enactments were passed permitting "boards of commissioners or other governing bodies of any municipality in this State to be relieved of establishment, maintenance, control, and management of public playgrounds and recreation places in said municipalities and authorizing boards of education of any school district in this State to establish, maintain, control, and manage public playgrounds and recreation places." (Education Bulletin, chap. 258, pp. 174–175. Amendments to School Law, session of 1923.)

Additional legislation was enacted and is contained in the 1925 Code of School Laws.

Whenever public parks or portions of public parks are reserved for use of the pupils of the public schools, the local boards of education make rules and regulations and in addition the local park commissioners may also prescribe certain rules and regulations. (New Jersey School Law, 1925. Secs. 669–70, p. 382.)

The board of education of any school district may use, or subject to reasonable regulations to be adopted by said board, permit the use of any schoolhouse and

rooms, therein, and the grounds and other property of the district, where not in use for ordinary school purposes, and with the consent of the local authorities in control thereof, may improve, equip, and use any park, playground, or other public place or property for the purpose of holding athletic, social, civic, and recreational meetings and entertainments and such other purposes as may be approved by the board of education. (School Laws of New Jersey, 1925, Art. VII, sec. 127, par. 1, p. 83.)

In 1928 further legislation was enacted authorizing the use of parks, playgrounds, or other public properties as playgrounds for pupils in public schools and for the public generally, in municipalities and towns. The April, 1928, issue of the Education Bulletin of the State of New Jersey, contains an act as follows:

An act to authorize the use of parks, playgrounds, or other public places as playgrounds for pupils in public schools and for the public generally in municipalities and towns.

1. It shall be lawful for the commission, board, or other local authority having control of any city, town, township, village, or borough, park, playground, or other public place or property in any municipality of this State to permit the same to be used for athletic purposes, or as playgrounds by the pupils of the public schools of such municipality and the public generally, subject to such reasonable regulations as may be prescribed by said commission or other local authority having control thereof. (Related Laws, Session of 1928, chap. 180; New Jersey School Law, 1928. Sec. 680, p. 403.)

New Mexico.—Local school authorities permit the use of school grounds during after-school hours.

New York.—Schoolhouses and grounds are under control of the local districts, boards of education, or board of school trustees.

The trustees or board of education may adopt reasonable regulations for the use of such schoolhouses, grounds, or other property when not in use for school purposes as are herein provided. (P. 149, sec. 455, chap. 16, education law as amended to July 1, 1928. University of the State of New York Bulletin No. 910, Albany, October, 1928.)

Schoolhouses and grounds connected therewith and all property belonging to the district shall be in the custody and under the control and supervision of the trustees or board of education of the district. The trustees or board of education may adopt reasonable regulations for the use of such schoolhouses, grounds, or other property, when not in use for school purposes, for such other public purposes as are herein provided. * * * The trustees or board of education of each district may, subject to regulations adopted as above provided, permit the use of the schoolhouse and rooms therein, and the grounds * * *. (Education law as amended to July 1, 1928. University of the State of New York. Bulletin No. 910, October 15, 1928, Albany, N. Y., chap. 16, art. 455, p. 149. Use of schoolhouse and grounds out of school hours.)

North Carolina.—While no special State legislation has been enacted regarding the use of school grounds during after-school hours, it is reported by the State department of education that in a number of places, towns and schools use the grounds conjointly. Among the powers and duties of the county superintendent of public welfare, may be mentioned that of promoting wholesome recreation in the

county and enforcing laws as regulated commercial amusement. (State Laws Relating to Public Welfare in North Carolina, 1927, Special Bulletin No. 9, issued by the North Carolina State Board of Charities and Public Welfare. P. 13, par. 7, sec. 5017.)

North Dakota.—The use of school property is subject to the approval of district school boards of education at all times. There are no State laws or regulations regarding the use of school grounds outside of school hours. (General School Laws of North Dakota, 1927, sec. 1173, p. 38.)

Ohio.—The State board of education recommends that school playgrounds be used during after-school hours by outside agencies for recreational purposes. Local boards of education have entire control of school property. The board of education authorizes the use of school property for any lawful purposes if same do not interfere with school purposes.

Any school district (by law) may, upon the nomination of a school superintendent, employ a person or persons to supervise, organize, direct, and conduct social and recreational work in such school districts. (School Laws of Ohio, 1928, sec. 7622–4, chap. 17, p. 273.)

Additional legislation, regarding the establishment of playgrounds and recreation centers in Ohio is as follows:

That the council or other legislative authority of any city, village, or the county commissioners of any county may designate and set apart for use as playgrounds, playfields, gymnasiums, public baths, swimming pools, or indoor recreation centers, any lands or buildings owned by any such city, village, or county, and not dedicated or devoted to other public use. Such city, village, or county may, in such manner as may be authorized or provided by law for the acquisition of land or buildings for public purposes in such city, village, or county, acquire lands or buildings therein for use as playgrounds, playfields, gymnasiums, public baths, swimming pools, or indoor recreation centers. (School Laws of the State of Ohio, 1922. Chap. 17, sec. 4065–1, p. 305.)

Oklahoma.—The local boards of education, by statute have entire authority over the use of school property.

Boards of education in independent school districts and in cities of the first class are hereby authorized to establish and maintain for children and adults public recreation places and playgrounds in public-school buildings, on the public-school grounds, on other public property under the custody and management of such boards, on suitable and desirable private property by and with the consent of the owners and in public parks, public libraries, or public property of whatsoever sort, by and with consent of the authorities having the custody and management of such public property. (P. 85, Art. XXV, sec. 316, School Laws of Oklahoma, 1929.)

Oregon.—Local district school boards have entire authority over the use of school property during after-school hours.

A district school board may at its discretion, permit a schoolhouse, when not occupied for school purposes, to be used under careful restrictions for any *proper purpose*, giving equal rights and privileges to all religious denominations or

political parties. * * * No dancing shall be permitted in any schoolroom. (Oregon School Laws, 1927, p. 54, Chap. V, sec. 148.)

Furthermore, school property may be used as community centers for recreational purposes * * * provided said use does not interfere with school work.

There is hereby established a civic center at each and every public schoolhouse and grounds; said use of public schoolhouse for said meetings shall in no wise interfere with such use and occupancy of said public schoolhouse and grounds as is now or hereafter may be required for the purposes of said public schools of the State of Oregon. (Sec. 149, Chap. V, Oregon School Code, 1927, p. 54.)

Pennsylvania.—By law, the boards of school directors of each school district have power to make rules and regulations regarding the use of school grounds by pupils during after-school hours.

The board of school directors of any district may permit the use of its school grounds and buildings for social, recreation, and other proper purposes, under such rules and regulations as the board may adopt, and shall make such arrangements with any city, borough, or township authorities, for the improvement, care, protection, and maintenance of school buildings and grounds for school, park, play, or other recreation purposes, as it may see proper, and any board of school directors may make such arrangements as it may see proper with any officials or individuals for the temporary use of school property for schools, playgrounds, social, recreation, or other proper educational purposes, primaries, and elections. (School Laws of Pennsylvania, 1929, Art. VI, sec. 627, p. 58.)

Additional legislation was enacted authorizing school districts "to join with municipalities in equipping, operating, and maintaining parks, playgrounds, playfields, gymnasiums, public baths, swimming pools, or indoor recreation centers." (School Laws of Pennsylvania, 1929, Art. XLVIII, sec. 4901, p. 238.)

Any school district shall have the power to join with any city, borough, township, or county or any combination thereof in equipping, operating, and maintaining parks, playgrounds, playfields, gymnasiums, public baths, swimming pools, and indoor recreation centers, and may appropriate money therefor. (School Laws of Pennsylvania, 1929, p. 239, sec. 4905, Art. XLVIII.)

Rhode Island.—By law, a town or city may create a board of recreation and permit the use of school premises as playgrounds.

South Dakota.—Limited legislation has been enacted regarding the use of school grounds during after-school hours.

SEC. 7547 (Additional powers of certain boards.)

The board of education of any district having a city located within its boundaries shall have the following powers in addition to those conferred by the preceding section:

1. To erect such schoolhouses and other structures, fences, or other inclosures, as the board shall deem necessary; to provide for the proper maintenance and preservation of the same, and to equip and maintain playgrounds and athletic parks or grounds.

2. To permit the use of athletic parks and grounds belonging to the school district for such athletic exhibitions and games, other than those of the public schools, as the board may determine will not conflict or interfere with the proper use of such parks and grounds for school purposes, for such compensation, as

shall be fixed by the board, which compensation shall be paid and placed in the general fund of the school district. (South Dakota School Laws, 1927, art. 2, sec. 7547, pars. 1 and 2.

Texas.—District school trustees have complete control in the matter of governing school property. (P. 32, sec. 95, Chap. V, Public-school Laws of Texas, 1929; Texas Revised Civil Statutes, 1925, art. 2754.)

Utah.—In 1923 special legislation was enacted authorizing cities, towns, counties, and school districts to acquire, maintain, and operate playgrounds, athletic fields, gymnasiums, public baths, swimming pools, camps, indoor recreation centers, and other recreational facilities. The control of such recreational facilities is vested in the local authorities. (Utah School Laws from the Compiled Laws of Utah, 1917, 1921, 1923, 1925, 1927, and 1929; pp. 76–77, chap. 100, Laws of Utah, 1923.)

Vermont.—The control of school properties is left to local school authorities, according to report from the State department of education. An examination of the General Laws of 1918 of the State of Vermont Relating to the Department of Education With Amendments to 1929, seems to confirm this report.

State legislation has been enacted in Vermont permitting municipal corporations to establish playgrounds and to delegate the conduct of these to a recreation board or to a school board.

An act authorizing municipal corporations to establish, maintain, and conduct systems of public recreation including playgrounds.

The legislative branch establishing such system may conduct the same through a department or bureau of recreation, or may delegate the conduct thereof to a recreation board created by them, or to a *school board*, or to any other appropriate existing board or commission. (Laws of Vermont, 1925, No. 62, sec. 3, p. 68.)

Any two or more municipal corporations may jointly establish, maintain, and conduct such a system of recreation, and may exercise all the powers given by this act. (Laws of Vermont, 1925, No. 62, sec. 4, p. 68.)

Virginia.—It is permitted by law that all school grounds and buildings may be used for community meetings or recreations outside of school hours. Special legislation has been passed permitting municipal authorities to delegate the control of municipal recreation activities to a school board.

Any city, town, or county may establish and conduct a system of public recreation and playgrounds. * * * The local authorities establishing such system may conduct the same through a department or bureau of recreation or may delegate the conduct thereof to a recreation board created by them or to a school board or to any other appropriate existing board or commission. (Virginia Code, 1924. Annotated. P. 681, sec. 3032b.)

Washington.—The school boards in each district may permit a wider use of school buildings for community recreation or other

community purposes. (Excerpts from the State School Law, p. 154, Chap. II, Art. VIII, sec. 637, contained in State Manual of Washington, 1927.)

West Virginia.—Cities, towns, school boards, or counties, are permitted to conduct systems of public recreation and playgrounds. Many school yards are in use during after-school hours on Saturdays and during the vacation period.

According to the law, "the governing school authorities may establish recreation playgrounds, and may conduct same through a department of recreation, or many delegate the conduct thereof to any existing board or commission. * * * If delegated to a recreation board it shall consist of five persons, including one member of a school board." (The School Laws of West Virginia, 1925, compiled and issued by the Department of Education, Charleston, p. 99.)

Wyoming.—The town council of any such town, in its corporate capacity, shall have the following powers: To establish and maintain or to assist in establishing and maintaining community centers and children's playgrounds for the benefit of the inhabitants thereof, and to make appropriations for the purpose out of the general fund of such city or town.

The following data have been obtained from local educational authorities in outlying possessions:

From Guam, it is reported that there is only one limitation regarding the use of school property. This property may not be used for religious instruction.

In Hawaii, the county boards of supervisors have full authority. The school grounds belong to the counties and are usually regarded as public playgrounds.

In the Panama Canal Zone, "The Bureau of Clubs and Playgrounds, in cooperation with the Division of Schools, maintains playgrounds in the several Canal Zone towns. The playgrounds are open to the children at all hours throughout the day, and trained instructors are employed to supervise and instruct the children. There are no special regulations regarding their use by any persons or person. Application to use school properties must be made to the head of the department of education and to the governor."

In St. Thomas, Virgin Islands, the director of education, provides a playground instructor and the grounds are open on all days, including Sundays and holidays.

TABLE 6.—*Summary of State legislation regarding the use of school playgrounds during after-school hours*

("X" indicates State law)

State	Local boards of education		
	May permit the use of school playgrounds during after-school hours by outside agencies	May establish and maintain recreational programs for school children and adults on school grounds during after-school hours	May cooperate with municipal agencies in establishing and maintaining recreational activities on school grounds
1	2	3	4
California	X	X	
Connecticut			X
District of Columbia		[1] X	X
Georgia			X
Idaho		X	
Illinois [2]		X	
Indiana [3]	X	X	X
Iowa	X		
Kansas		X	
Kentucky		[1] X	
Maryland	X		
Massachusetts [4]	X	X	X
Michigan		X	X
New Jersey [5]	X	X	X
New York	X		
Ohio	X	X	
Oklahoma	X	X	
Oregon		X	
Pennsylvania	X		X
Rhode Island			X
South Dakota	X		
Utah		X	
Virginia	X		
Washington	X	X	
West Virginia	X	X	
Wyoming			X

[1] May permit use of school property as community centers.
[2] Limited to cities having a population of 100,000 and more.
[3] Limited to cities of the first, third, fourth, and fifth classes, and in towns.
[4] Enactments apply to the entire State except Boston.
[5] Additional legislation permitting boards of education to use and supervise parts of municipal parks for school activities.

IV. Progress in School Playground Development

Progress reported by State departments.—Throughout the country the State departments of education of many of the States are rendering various kinds of assistance in the matter of securing and equipping school playgrounds. In some States the State departments of education include a special division of school buildings and grounds and a director has been placed in charge of the work. In some States all plans for school buildings and sites must be submitted for approval to the State department of education.

In some States personal conferences and visits are made by the State director of physical education whose duty it is to see that sufficient space and equipment are provided for carrying on the required program in physical education.

In other States valuable assistance is rendered by means of special suggestive circulars and pamphlets regarding construction layout and equipment of playgrounds. These circulars have been prepared and distributed to county superintendents and principals throughout the State.

Alabama.—During the past year a special research regarding the play facilities of the schools throughout the State was conducted by Dr. A. J. Sharman, State director of physical education. In regard to the purchase or improvement of playgrounds, it is the duty of the county superintendent of education to recommend in writing the "purchase of playgrounds and school sites, and to see to it that the plans and specifications and rules and regulations of the State board of education, etc., are carefully followed out." (Alabama School Code, 1927. See p. 64, sec. 155, Art. VII, and p. 84, sec. 226, Art. X.)

Arkansas.—In 1924 there was created in the State department of education a division of school ground and schoolhouse planning, with a director in charge of the work.

Visits by the State supervisor of buildings and grounds, or plans for buildings, may be had without cost to school officials or school organizations through the county superintendent or the State Department of Education, Little Rock, Ark.

The division prepares school-ground plans for communities, when convinced that these plans will be developed.

During the period 1924–1926 ground plans were furnished to 12 counties in the State and practically all were developed.

California.—The 1929 State Manual of Physical Activities for Elementary Schools contains a chapter regarding areas, equipment, and layouts suitable for school playgrounds.

Connecticut.—Special attention has been given to the improvement of rural school grounds. The State department of education has given special attention to the problem of play areas and beautification of school grounds.

District of Columbia.—There is need for additional playground space, especially around the older schools. This need was brought out by a special survey of the public-school system, made by the United States Bureau of Efficiency in 1928. (S. Doc. No. 58, 70th Cong.) A special study is under way and a recent conference was called under the auspices of the National Capital Park and Planning Commission. Representatives from various organizations which are promoting recreational work in the District of Columbia participated in the conference and discussed the possibilities of coordination of their work as well as the problems of planning for future areas.

Delaware.—A special bulletin, Minimum Standards for School Building Sites, was published in 1927. In that bulletin it is recommended that—

> Before any ground is purchased as a site for a new school or for an addition to an existing school the approval of the State board of education shall be secured. It is recommended that the State board of education be advised of proposed sites and be given an opportunity to look over the same before application for approval is asked. Final application for such approval shall be accompanied by a map showing dimensions, surrounding roads, points of compass location in district. * * * The site should be regular in outline and have a minimum size of 2 acres plus an additional two hundred fifty (250) square feet for each pupil, with a maximum of 10 acres. Not more than 20 per cent of the site is to be used for the building (p. 15, Minimum Standards for School Buildings and Sites. Published by department of public instruction, 1927).

Florida.—A mimeographed circular of information, School Sites and Play Space, was issued recently by the State department of education. That circular contains suggestions for layout and equipment along with reports of progress in various parts of the State in the matter of providing play areas.

Georgia.—The Manual for Georgia Teachers, published by the State department of education, contains suggestions regarding suitable school sites, and their preparation for the play activities of the school children.

Illinois.—A special circular, No. 219, entitled, "Aids to Teachers and School Directors of the One-Teacher School," was issued by the State superintendent of public instruction in 1927. The bulletin contains suggestions for layout of school grounds for small rural schools.

Kansas.—A few suggestions regarding the selection and layout of school grounds are included in the bulletin, Better Schools for Kansas, published by the State Department of Education, in 1928.

Kentucky.—The pamphlet, Rural School Standards, published in 1923, under the direction of the State superintendent of public instruction, contains suggestions for equipping and beautification of school yards. Furthermore, the regulations of the State department of public instruction require that the "school site must meet the requirements as to 'ample grounds'" as indicated on the standardization score card. According to this score card, 125 points were allowed for grounds and outbuildings—of this number 35 were allowed for suitable grounds. However, no specific acreage was required; "at least 1 acre, preferably more, depending on the size of the school; for a school of 150 or more pupils not less than 2 acres; acreage enough to meet educational needs of pupils for play and recreation—grounds well laid out, well drained, and fenced."

Louisiana.—The general school laws of the State require that plans for new schools be submitted to the State department of education

for approval. This law makes it possible for the building plans committee of the State department of education to exercise a decided influence in respect to the size of playgrounds. Unless there are unusual financial considerations involved, the usual recommendation is that the site contains not less than 5 acres.

Maine.—There has been such an ample provision of school yards throughout the State that there seems no need for rules and regulations requiring specified areas. In fact at the present time nearly every school in the State is provided with 2 to 5 acres, and 15 points out of 100 required for a standard school may be scored on ample playgrounds equipped for intelligent play. At the present time, the State department of education is carrying out a project of improving play areas as follows: The State is contributing $500 to certain towns for the beautification of a special number of school buildings and grounds representing the 1, 2, 3, and 4 room types. In order to get the amount which the State contributes, the community must undertake a program of school equipment and beautification. There must be committees appointed on interior decoration and equipment, playgrounds, and equipment, and on general arrangement. In addition there must be committees appointed who will take care of this work during the summer.

Maryland.—Practically all of the schools are visited by Dr. William Burdick, State supervisor of physical education who gives special attention to the matter of suitable playground layouts for rural schools.

Massachusetts.—Previous to 15 years ago, few schools had acquired large playgrounds. However, considerable attention has been given to this matter recently. Statistical studies show that large sites have been acquired by many schools throughout the State. A special survey made for the 5-year period, 1922–1927, regarding the provision of school playgrounds, points out the following numerical increase in the provision of these facilities:

In 1922 there were 225 playgrounds for the elementary schools; in 1927 there were 778 playgrounds for the elementary schools; in 1922 there were 54 playgrounds and 38 athletic fields for junior high schools; in 1927 there were 97 playgrounds and 66 athletic fields for junior high schools; in 1922 there were 52 playgrounds and 91 athletic fields for high schools; and in 1927 there were 61 playgrounds and 133 athletic fields for high schools.

Missouri.—A special bulletin, the Socialized School, the School Grounds and their Equipment, published in 1925, contains detailed suggestions for planning and equipping playgrounds.

Nebraska.—A special bulletin, Rural School Standards, was published in 1927 by the department of public instruction and a special

bulletin regarding landscape beautification of school yards was issued in March, 1929.

New Jersey.—A special study of the status of physical and health education in the State of New Jersey, conducted by James E. Rogers, was published May 20, 1927. That study contained a plea for additional playground space and equipment. A survey of the school playgrounds of the entire State is in progress at the present time.

New York.—The State department of education makes definite recommendations regarding the layout and equipment of school yards. A circular of information prepared by the physical education bureau and issued monthly, frequently contains information and suggestions regarding school playgrounds. The acquisition of large areas for school yards is a recent development. Few were acquired previous to 15 years ago. However, during the period 1913–1923, sites of 5 or more acres were purchased for 110 city and village schools.

North Carolina.—The State department of education has assisted materially in the problem of layout and equipment of school yards by a generous distribution of several plue prints prepared under the direction of Mr. John J. Blair, director of schoolhouse planning, Raleigh, N. C. The blue prints available contain suggested layout and equipment of playgrounds, and plans for beautification of school yards.

North Dakota.—A leaflet containing the requirements for standardization of rural schools published by the State department of education contains a few general suggestions regarding the school grounds and their equipment.

Oklahoma.—A publication, Model and Accredited Elementary School Buildings, contains a few suggestions regarding the layout, equipment, and beautification of school grounds.

Oregon.—While there are no laws or regulations regarding suitable areas for school playgrounds, a few suggestions for school officials regarding playgrounds were included in the compilation of school laws published in 1923.

Pennsylvania.—The State council of education has fixed a minimum standard of from 2 to 5 acres for consolidated schools of the State dependent upon the character and size of the school. In order for a district to erect a consolidated school on less than 2 acres special action must be taken by the State council of education. It is very seldom that this request is made. School boards generally throughout the State are securing even more land than the minimum prescribed by the State Council.

The State Department of Public Instruction of Pennsylvania, in 1927, issued a special playground manual containing suggestions for layout and equipment of school yards.

The Bureau of Municipal Affairs, Department of Internal Affairs of the Commonwealth of Pennsylvania, established by law, at Harrisburg, Pa., in 1919, has given assistance to many small and some large municipalities. This bureau permitted by law to employ landscape architects and upon request from municipal authorities these specialists not only inspect proposed park and playground plans, but also prepare plans and specifications. This assistance is provided for municipalities without cost so that all local appropriations for park and playground purposes may be expended entirely on the improvements without reserving any amount for preliminary studies.

At the present time landscape architects and planners are working on plans for 22 playgrounds and 4 parks, and planting plans for a dozen school yards located in various sections of the State.

Among the publications of the department of internal affairs of the bureau of municipal affairs may be mentioned: The Planning and Beautification of School Grounds (mimeographed circular of information, March, 1928, 21 pp.) and The Recreational Environment of the Child (mimeographed circular, January, 1928, 12 pp.). In general, the State department of public instruction and the bureau of municipal affairs recognize the fact that comprehensive general city planning for the present needs and future growth of any city must take into consideration the fact that ample space must be provided for school yards not merely for present needs, but also for future growth.

South Carolina.—The State department of education issued in 1924 a publication, Rural School Improvement Bulletin, containing suggestions for improvement of school yards. It is also required by this State that all plans and specifications for new school buildings shall be submitted to and approved by the State board of education. In 1921 special legislation was enacted whereby certain funds were appropriated which would be available for districts in which new schools were to be erected. Among the conditions which districts had to meet in order to be eligible for receiving funds from this appropriation (State aid) was the provision of 4 acres or more as a minimum for a school site. (General School Laws of South Carolina, 1921, p. 9, sec. 1763, par. 2.)

Texas.—In 1923, the State department of education issued a bulletin entitled "School Grounds, School Buildings and Their Equipment." During that same year special legislation was enacted by the thirty-eighth legislature (September 1, 1923, to August 31, 1925) which provided for an appropriation to be used to aid rural schools. One and one-half million dollars, for the year ending August 31, 1924, and one and one-half million dollars for the year ending August 31, 1925, were appropriated. Among the conditions which

had to be met by rural schools in order to be eligible, to receive State aid, the first one included a "plot of ground not less than 1 acre." (Public School Laws of Texas, 1929. Chap. XV, sec. 347, par. 1, p. 119.)

Furthermore, in order to encourage consolidation of small schools, provision was included in the aforementioned enactment whereby a special appropriation could be secured from the State department of education for each rural consolidation effected during the biennium ending August 31, 1925. Among the conditions which had to be met by consolidated districts in order to be eligible to receive this special appropriation may be mentioned: "A total population not exceeding 500; a rural high school having at least 4 teachers; and a location of not less than 5 acres of land."

In 1926 the State Department of Education of Texas published a pamphlet entitled "Texas Rural School Standards (Bulletin No. 216)." This bulletin included definite requirements regarding the areas required for schools of various enrollments.

Vermont.—In 1927, an act was passed by the General Assembly to appropriate $5,000 for a community schoolhouse fund. The act provided that when a community raised money otherwise than by taxation for the purpose of furnishing and improving their school building or grounds, an equal amount of money, but not in excess of $100 in any one year, to be known as a community schoolhouse fund, be supplied by the State to the school district owning said school building. The sum of $5,000 was appropriated for each of the fiscal years ending June 30, 1928, and June 30, 1929.

Washington.—The State course of study compiled and printed in 1927 for the State department of education contains suggested minimum standard areas and equipment for school yards.

West Virginia.—While the "Topography of the State makes a general law inadvisable," the county superintendent is required to approve sites for school grounds. Many will not approve less than 1 acre. The West Virginia State manual of physical education for rural schools contains suggestions for playgrounds for rural schools.

Wisconsin.—A pamphlet, Rural School Standards, published in 1925 by the State department of education, contains a few suggestions regarding the layout and equipment of school playgrounds.

Wyoming.—In 1919 a conference was called by the Commissioner of Education of Wyoming, known as the better-school conference, for the purpose of drawing up standards for rural schools. The standards adopted at this time were somewhat revised in 1921, and published in the form of a bulletin entitled "Wyoming Standard Rural Schools." Any school which meets the requirements mentioned in this bulletin may qualify as a standard school and be

presented with a shield bearing the words, "Wyoming Standard School." Among the requirements of a standard Wyoming rural school may be mentioned the following:

Playground: (*a*) Adequate equipment, such as playground balls, bats, volley balls, bean bags, etc. (No expensive apparatus is required or recommended.)

(*b*) Property supervised: Teachers must actively and in person supervise not less than 30 minutes daily. Whenever children can not be on the playgrounds, teachers must supervise play inside the building for 30 minutes.

Furthermore, it is stated in this bulletin that as a general rule the playground should not contain less than 1 acre. * * * For a larger school, several acres are needed. (Wyoming Standard Rural Schools. Bulletin No. 2, Series B. State Board of Education, Laramie, Wyo., 1921.)

Progress in cities.—Substantial progress has been made throughout the country in the matter of providing large playgrounds for schools. In general, the annual report of the boards of education of city public schools, along with numerous recreational surveys, carried on in various cities by school and municipal recreational agencies, show that many school sites have been acquired which are not merely sufficient for the present needs but also provide for future growth and congestion of population in school districts.

The following excerpt from the Twenty-Fourth Annual Report of the Superintendent of Schools of Denver, Colo., includes a brief review of a 4-year period (1923–1927):

PURCHASE OF ADDITIONAL SITES AND PLAYGROUNDS

During the 4-year period from 1923 to 1927, it has been necessary to purchase a number of sites for new schools. Some of these sites have been purchased in anticipation of future needs. It has been found that it costs much less to purchase an unimproved site in advance of the development of a certain section of the city than it does to wait until a neighborhood is built up, when an adequate site properly located can be secured only by the purchase of improved property. A block of ground at the edge of population may be purchased for amounts ranging from $3,500 to $10,000, depending on the locality.

To secure an adequate playground and site for the Ebert School in an old section of the city required the expenditure of $103,586.76. This illustrates the difference between foresight and hindsight in the operation of schools.

One of the greatest needs which the schools have found is that of increasing the playground space at the older buildings. Additional playground has been purchased for 24 of the older schools with the result that there is now no school in Denver that does not have at least some kind of a playground, although in a number of instances the space is still inadequate.

Furthermore, in 1929, a special study made by the Denver Planning Commission proposes to set up a comprehensive plan of development. The study presents a general outline of the recreational needs of small children, school children, and adults. It includes a complete

survey of the facilities, available at this time, including 27 school playgrounds which are being used for municipal recreation. It proposes an elaborate plan for future development which will afford equal opportunities for all children in the city. Whereas at the present time 23 school playgrounds are used for municipal recreation, it is suggested that additional school playgrounds be acquired so that 80 school grounds will be available for similar use.

Trenton, N. J.—A new junior high school adjoining an elementary school has been provided with 11 acres. A new high school is under construction which has been provided with 34 acres. The building will take up about 14 acres, leaving about 20 acres for playground and athletic purposes. In addition it has been planned that three new junior high schools will have sites of from 6 to 8 acres each, allowing from 4 to 6 acres for play fields.

Winston-Salem, N. C.—In 1918 the school board passed a resolution that no school should be built thereafter on less than 10 acres of land. Ten schools erected in the city since that time, have 265 acres of playground. One high school has 75 acres, of which 50 acres are devoted to a playground, athletic field, and park. The entire program of physical education activities and summer playground activities are carried on under the board of education.

Toledo, Ohio.—Seven hundred and fifty thousand dollars were spent recently in enlarging play spaces around old schools. The new Libbey High School has a site of 36 acres. About two-thirds of the space is devoted to playgrounds. A new high school under construction at this time has an acreage of 26½ acres. Of this amount about 8 are reserved for playgrounds.

Portland, Oreg.—The city park department recently has established several small parks adjoining several elementary schools and school children enjoy these areas during recess periods. Furthermore, additional plans have been made which will provide for the recreational needs, 50 years to come. According to these plans there will be available at that time, 100 square feet of playing space for every child.

Harrisburg, Pa.—The two downtown high schools which formerly lacked indoor and outdoor space have been moved out into the east and west side of the town. Each school has been provided not only with gymnasiums and swimming pools, but also with play areas of 38 and 45 acres, respectively.

Dallas, Tex.—The school board and the park board are cooperating in the work of providing proper play facilities at the least possible cost. In view of the fact that the location of the school is usually the center of population of the district, the school board has joined the park board in purchasing the property adjacent to schools. Eight or ten playgrounds have been located, either adjoining or across the street from the schools. The school board permits the

use of its entire recreational equipment by the park board and the latter has provided many special layouts, including football fields, baseball diamonds, basketball courts, tennis courts, and golf courses which are available for the school pupils.

San Angelo, Tex.—All schools have been provided with an area of two blocks and two schools have been provided with 10-acre plots.

Port Arthur, Tex.—Two junior high schools have been built recently. One of these, the Woodrow Wilson Junior High School, has been provided with 10 acres. The other, the Thomas Jefferson Junior High School, has been provided with 15 acres.

Seattle, Wash.—In 1928 a special study of the recreational facilities was made at the request of Mayor Bertha K. Landes. The study was made by a special committee, including two members of the park board, and two members of the school board. It was brought out in this study that slightly less than 1 per cent of the total land area is occupied by playground property under the school and park boards. There is 1 acre of recreational space for every 193 people. It is estimated that the amount of play space per child is about 136 square feet. Of this space 66 square feet are provided by the school board and 70 square feet are provided by the park board.

A special report of the National Conference of City Planning, published in 1926 contains the following information regarding the acquisition of large areas for elementary, junior high, and high schools in various cities throughout the country.

Large sites have been acquired for elementary schools in the following cities:

A 12-acre site in Long Beach, Calif.; an 18¾-acre site in New Britain, Conn.; a 10-acre site in Chicago, Ill.; thirty-seven 5-acre sites in Chicago, Ill.; a 12-acre site in Richmond, Ind.; an 18.7-acre site in Leavenworth, Kans.; a 36-acre site in Flint, Mich.; two 11-acre sites in Omaha, Nebr.; two 10-acre sites in North Tonawanda, N. Y.; a 14-acre site in Greensboro, N. C.; a 30-acre site in Winston-Salem, N. C.; two 10-acre sites in Columbus, Ohio; a 14-acre site in Houston, Tex.

Large sites have been acquired for junior high schools in the following cities:

A 19-acre site in Fresno, Calif.; a 22-acre site in Riverside, Calif.; a 12-acre site in Pueblo, Colo.; a 10-acre site in Chicago, Ill.; a 17½-acre site in Grand Rapids, Mich.; an 11-acre site in Flint, Mich.; a 13-acre site in Lansing, Mich.; a 15-acre site in Jamestown, N. Y.; a 15-acre site in Charlotte, N. C.

Large sites have been acquired for senior high schools in the following cities:

A 30-acre site in Fresno, Calif.; a 50-acre site in Palo Alto, Calif.; a 40-acre site in Redwood, Calif.; a 42-acre site in Santa Barbara, Calif.; a 68-acre site in Denver, Colo.; a 20-acre site in Tampa, Fla.; a 28-acre site in Augusta, Ga.; a 67-acre site in Wichita, Kans.; a 15-acre site in Alexandria, La.; a 43-acre site in Flint, Mich.; a 25-acre site in Omaha, Nebr.; a 75-acre site in Winston-Salem, N. C.; a 40-acre site in Cincinnati, Ohio.

Summary

The opinion is widespread throughout the country, that while 37 States have passed laws requiring that physical education should be included in the school curricula, the greatest handicap retarding the work at this time is still the lack of sufficient play space. In fact it was pointed out in a survey of the status of physical education in city public schools published by the United States Office of Education in 1929, that 20 per cent of the cities having a population of 30,000 to 100,000 had made no provision for playgrounds for the elementary schools and that scarcely 50 per cent of the high schools throughout the country were provided with school playground or separate athletic fields.

In recognition of this need of play space, the present study points out the fact that laws have been passed in 8 States requiring that certain areas be provided for school playgrounds. Rules and regulations have been made by State boards of education in 20 States requiring certain areas for school sites. Definite areas have been suggested as standards for city and rural schools of various enrollments by 36 State departments of education.

Areas required by law vary from 1 to 6 acres. Areas required by rules and regulations of the State boards of education vary in the elementary schools from 1 to 6 acres, and in the high, junior high, and senior high schools from 2 to 10 acres. Areas recommended by State boards of education vary in the elementary schools from 1 to 12, in junior high schools from 1 to 10 acres, and in senior high schools from 1 to 20.

Furthermore, the study shows the gradual development of standards in the matter of determining the space necessary for school playgrounds for elementary, high, junior high, and rural schools. It shows the need for a well-planned layout of school playgrounds into special plots suitable for the children of the various ages and grades. It shows the tendency to plan sufficient areas, not only for the required program in physical education and recess activities, but also for the after-school games and sports.

It points out the fact that municipal recreation boards and city planning associations are cooperating with city boards of education in securing and planning large areas for school and municipal recreation.

In general, inadequate school grounds found to-day are considered a lack of foresight on the part of the former school boards and school administrators. Large school playgrounds are recognized as an essential part of the school equipment.

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